

# 2003 IBC BUILDING CODE AMENDMENTS

**Ordinance No. 3505** 

Adopted June 17, 2003

Effective September 16, 2003

PLANNING & DEVELOPMENT SERVICES DEPARTMENT

# ORDINANCE NO. 3505

AN ORDINANCE OF THE COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, AMENDING CHAPTER 31, ARTICLE III OF THE SCOTTSDALE REVISED CODE, RELATING TO THE BUILDING CODE, ADOPTING THE 2003 EDITION OF THE "INTERNATIONAL BUILDING CODE", INCLUDING APPENDICES, THE 2003 EDITION OF THE "INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS", INCLUDING APPENDICES, AND THE ARIZONANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES; AND ADOPTING REVISIONS THERETO.

BE IT ORDAINED by the City Council of the City of Scottsdale, Arizona, as follows:

<u>Section 1.</u> Section 31-31 of the Scottsdale Revised Code is hereby repealed and replaced by a new Section 31-31, which shall read as follows:

#### Sec. 31-31. Adoption.

The following documents are adopted by reference and shall be the building code of the city. Three (3) copies of each shall at all times remain in the office of the city clerk and be open to inspection.

- 1) The International Building Code, 2003 Edition, as published by the International Code Council, Inc., declared a public record by Resolution #6310 of the City of Scottsdale, is hereby referred to, adopted and made a part hereof as if fully set out in this ordinance
- 2) The International Residential Code for One- and Two-Family Dwellings, 2003 Edition, as published by the International Code Council, Inc., declared a public record by Resolution #6311 of the City of Scottsdale, is hereby referred to, adopted and made a part hereof as if fully set out in this ordinance.
- 3) Those documents known as "Arizonans with Disabilities Act" (Arizona Revised Statutes Section 41-1492.03) and the Act's implementing rules (R 10-3-403 and R 10-3-404, which includes 28 CFR Part 35, and 28 CFR 36 and the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)"), declared a public record by Resolution #6312 of the City of Scottsdale, and hereby referred to, adopted and made a part hereof as if fully set out in this ordinance.

Section 2. Section 31-32 of the Scottsdale Revised Code is hereby repealed and replaced by a new Section 31-32, which shall read as specified in that certain document entitled "City of Scottsdale Amendments to the International Building Code, 2003 Edition," declared to be a public record by Resolution #6313of the City of Scottsdale, and hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance.

<u>Section 3.</u> Article VIII, Public Accommodations for Handicapped, of Chapter 31 of the Scottsdale Revised Code, including sections 31-201 through 31-236, is hereby repealed.

<u>Section 4.</u> Any person found guilty of violating this Ordinance shall, in addition to any other applicable penalty, is subject to the following:

- **105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.
- **110.4 Revocation.** The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.
- **113.4 Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.
- **117.7 Revocation of Registration.** The building official may suspend or revoke a registration when the registrant fails to comply with any of the registration responsibilities or for violation of any provision of this code. When the building official deems that the registration shall be suspended or revoked, The registrant will be notified in writing by certified mail at least seven days prior to suspension or revocation. The registrant may appeal to the Building Advisory Board of Appeals within 30 days after notice of suspension or revocation.
- <u>Section 5.</u> The repeal of any provision of the Scottsdale Revised Code effectuated by this Ordinance does not affect the rights and duties that matured or penalties that were incurred and proceedings that were begun before the effective date of this Ordinance.
- Section 6. If any section, subsection, sentence, clause, phrase or portion of this ordinance or any part of these amendments to the Building Codes adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdictions, such decision shall not affect the validity of the remaining portions thereof. If there is any conflict or inconsistency between the provisions of this ordinance, the more restrictive provisions apply.

<u>Section 7</u>. The effective date of this ordinance shall be September 15, 2003.

PASSED	AND ADOPTED BY	THE Council of the	e City of Scottsd	ale, Maricopa	County
Arizona this	day of June, 2003.				

ATTEST:	A municipal corporation
Sonia Robertson	Mary Manross
City Clerk	Mayor
APPROVED AS TO FORM:	
David A. Pennartz	
City Attorney	

#### Sec. 31-32. Amendments.

# 1) The International Building Code, 2003 Edition, adopted by section 31-31 is amended in the following respects:

Delete Chapter 1, Administration, in its entirety and substitute the following:

# CHAPTER 1 ADMINISTRATION

## SECTION 101 GENERAL

- 101.1 Title. These regulations shall be known as the *Building Code of The City of Scottsdale, Arizona*, hereinafter referred to as "this code."
- **101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition *of* every building or structure or any appurtenances connected or attached to such buildings or structures.

#### **Exceptions:**

- 1. Detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures may comply with the 2003 Edition of the International Residential Code.
- **101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.
- **101.3 Intent.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.
- **101.4 Referenced codes.** The other codes and standards listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code shall be considered part *of* the requirements *of* this code to the prescribed extent *of* each such reference.
- **101.4.1 Electrical.** The provisions *of* the Scottsdale Revised Code, Chapter 31, Article IV, shall apply to the installation *of* electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.
- **101.4.2 Gas.** The provisions of the *International Fuel Gas Code* shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.
- **101.4.3 Mechanical.** The provisions of the Scottsdale Revised Code, Chapter 31, Article VI shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.
- **101.4.4 Plumbing.** The provisions *of* the Scottsdale Revised Code, Chapter 31, Article VII shall apply to the installation, alteration, repair and replacement *of* plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects *of* a medical gas system.

- **101.4.5 Property maintenance.** The provisions *of* this code shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards. Responsibilities *of* owners, operators and occupants; and occupancy *of* existing premises and structures are contained in the Scottsdale Revised Code, Chapter 18.
- **101.4.6 Fire prevention.** The provisions *of* the Scottsdale Revised Code, Chapter 36, Article II shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use *of* structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.
- **101.4.7** Energy. The provisions of the *International Energy Conservation Code* shall apply to all matters governing the design and construction of buildings for energy efficiency.
- **101.4.8 Green Building Program.** The provisions qualifying projects for the voluntary *Scottsdale Green Building Program* shall apply as long as the project is enrolled in the Scottsdale Green Building Program.

# SECTION 102 APPLICABILITY

- **102.1 General.** Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- **102.2 Other laws.** The provisions *of* this code shall not be deemed to nullify any provisions *of* local, state or federal law.
- **102.3 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.
- **102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.
- **102.5 Partial invalidity.** In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.
- **102.6 Existing structures.** The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, or the *International Fire Code*, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

# SECTION 103 ORGANIZATION AND ENFORCEMENT

- **103.1** Creation of enforcement agency. There is hereby established in this jurisdiction a code enforcement agency which shall be under the administrative and operational control of the building official.
- **103.2** Appointment. The building official shall be appointed by the chief appointing authority of the jurisdiction.
- **103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to deputize technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

For the purpose of maintenance related inspections pertaining to Chapter 31, Section 3109, "Barriers for Swimming Pools, Spas, and Tubs", the code enforcement inspectors of the Planning & Development Services Department or Neighborhood Services Department shall have the authority to carry out the functions of code enforcement.

## SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL

- **104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code. The building official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.
- **104.2 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.
- **104.3 Notices and orders.** The building official shall issue all necessary notices or orders to ensure compliance with this code.
- **104.4 Inspections.** The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.
- **104.5 Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.
- **104.6 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.
- **104.7 Department records.** The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.
- **104.8 Liability.** The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.
- **104.9 Approved materials and equipment.** Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

**104.9.1 Used materials and equipment.** The use of used materials which meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the building official.

**104.10 Modifications.** Wherever there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the Development Services Department.

**104.10.1 Staff Variance Procedure.** Requests for a variance of code requirements shall be made in writing on a form provided by the building official. The applicant is responsible for providing all information, calculations, or other data necessary to substantiate each request for a variance. The building official shall approve, approve with stipulations, or deny such applications based upon the substantiating data submitted and the building official's determination that the variance does or does not result in substantial compliance with the intent of this code. In deciding each case, the building official may consider or require alternative methods or systems to be used in compensation for the particular code provision to be modified. The details of any action granting variances shall be recorded and entered in the files of the department.

**104.10.2 Appeals**. Any person dissatisfied with a formal order, decision, or determination made by the building official may request a hearing by the Building Advisory Board of Appeals. Appeals shall be made in writing on a form provided by the building official and shall be accompanied by a non-refundable fee as set forth in Chapter 31. Article II of the Scottsdale Revised Code.

**104.11 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

**104.11.1 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

**104.11.2 Tests.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

# SECTION 105 PERMITS

**105.1 Required.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit. A permit is also required when clearing or grubbing plant materials as specified in the Native Tree Preservation or Environmentally Sensitive Lands regulations of the city zoning ordinance.

**105.2** Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

#### **Building:**

- 1. One-story detached accessory structures used as residential tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.6 m<sup>2</sup>).
- 2. Oil derricks.
- 3. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18 925 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- 4. Sidewalks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below and which are not part of an accessible route.
- 5. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 6. Temporary motion picture, television and theater stage sets and scenery.
- 7. Prefabricated swimming pools accessory to a Group R-3 occupancy, as applicable in Section 101.2, which are installed entirely above ground.
- 8. Temporary shade cloth structures which comply with zoning requirements and not including utility service systems.
- 9. Swings and other playground equipment accessory to detached one- and two-family dwellings.
- 10. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R-3, as applicable in Section 101.2, and Group U occupancies.
- 11. Movable cases, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

#### **Electrical:**

**Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

**Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for power supply, the installations of towers and antennas.

**Temporary testing systems:** A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

#### Gas:

- 1. Portable heating appliance.
- 2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

#### Mechanical:

- 1. Portable heating appliance.
- 2. Portable ventilation equipment.
- 3. Portable cooling unit.
- 4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
- 5. Replacement of any part which does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

#### **Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

- 2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
- **105.2.1** Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.
- **105.2.2 Repairs.** Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.
- **105.2.3 Public service agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.
- **105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the Development Services Department for that purpose. Such application shall:
  - 1. Identify and describe the work to be covered by the permit for which application is made.
  - 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
  - 3. Indicate the use and occupancy for which the proposed work is intended.
  - 4. Be accompanied by construction documents and other information as required in Section 106.3.
  - 5. State the valuation of the proposed work.
  - 6. Be signed by the applicant, or the applicant's authorized agent.
  - 7. Give such other data and information as required by the building official.
- **105.3.1 Action on application.** The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefor. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefor as soon as practicable,
- **105.3.2 Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.
- **105.4 Validity of permit.** The issuance or granting of a permit shall not be construed to be a pen-nit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.
- 105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Work in progress inspections will be performed, on request, when evidence of continuing activity is needed. The building official or building inspection

manager is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

**105.7 Placement of permit.** The building permit and all approved construction documents shall be kept on the site of the work until the completion of the project.

## SECTION 106 CONSTRUCTION DOCUMENTS

**106.1 Submittal documents.** Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

**106.1.1 Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

Plans shall include building code data on the cover sheet or site plan consisting of occupancy group, type of construction, floor area and allowable floor area calculations, height and number of stories, fire sprinkler status and uses, and occupant load(s). Plans for buildings shall indicate how required structural and fire- resistive integrity will be maintained where penetrations will be made for electrical, mechanical, plumbing and communication conduits, pipes and similar systems.

- **106.1.1.1 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.
- **106.1.1.2 Green Building Program Information.** For projects enrolled in the city Green Building Program, the plans shall include applicable Green Building Program Checklist items.
- **106.1.2 Means of egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, as applicable in Section 10 1. 2, and 1- 1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.
- **106.1.3** Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, comers, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

- **106.1.4 Standard Plans.** As used in this code, the term "plan" means a single family residential construction plan used two or more times in a given subdivision. A standard plan may include optional features that are ancillary to the base plan. Subsequent to approval, all plan modifications involving options or revisions shall be submitted for review. All changes shall be clearly identified by the use of clouded symbols, deltas, or other appropriate means. The review fee will be charged hourly in accordance with Chapter 46 of Scottsdale Revised Code. If changes involve extensive modifications or, in the building officials' judgment, are not adequately defined, the revised plans will be charged a full plan check fee.
- 106.2 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.
- **106.3 Examination of documents.** The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.
- **106.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.
- **106.3.2 Previous approvals.** This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.
- **106.3.3 Phased approval.** The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

## 106.3.4 Design professional in responsible charge.

106.3.4.1 General. When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1709, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also duties specified in Section 1704).

**106.3.4.2 Deferred submittals.** For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period.

Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the building official.

**106.4 Amended construction documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

**106.5 Retention of construction documents.** Construction documents shall be retained by the building official as required by state or local laws.

# SECTION 107 TEMPORARY STRUCTURES AND USES

- **107.1 General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.
- **107.2** Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- **107.3 Temporary power.** The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the Scottsdale Revised Code, Chapter 31, Article IV.
- **107.4 Termination of approval.** The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

# SECTION 108 FEES

- **108.1 Payment of fees.** A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
  - 108.1.1 The determination of value or valuation under any of the provisions of this code shall be made by the building official, determined by the use of the latest "Building Valuation Data" table as published by the International Code Council. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire- extinguishing systems and any other permanent equipment
  - **108.1.2** Valuation for tenant improvements projects involving interior alterations or repairs shall be determined by using 30% of the unit cost in the "Building Valuation Data" table or by the construction bid, notarized by the general contractor."

- **108.2 Schedule of permit fees.** On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by the City of Scottsdale.
- 108.3. The review fee will be charged in accordance with Chapter 46 of Scottsdale Revised Code.
- **108.4 Work commencing before permit issuance.** Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the building official that shall be in addition to the required permit fees.
- **108.5 Related fees.** The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building pen-nit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed law.
- **108.6 Refunds.** The building official is authorized to establish a refund policy.

#### SECTION 109 INSPECTIONS

- 109.1 General. Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.
- **109.2 Preliminary inspection.** Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.
- **109.3 Required inspections.** The building official, upon notification, shall make the inspections set forth in Sections 109.3.1 through 109.3.10.
- **109.3.1 Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.
  - **109.3.2** Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the sub floor.
  - **109.3.3 Lowest floor elevation.** Elevation certification inspections shall be made at the appropriate time indicated in Development Services Department procedures.
  - **109.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.
- **109.3.5 Lath and gypsum board inspection.** Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.
- **109.3.6 Fire-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.

- 109.3.7 Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter 13 and shall include, but not be limited to, inspections for: envelope insulation R and U values, fenestration U value, and HVAC duct system R value.
- **109.3.8 Other inspections.** In addition to the inspections specified above, the building official is authorized to make of or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the Development Services Department.
- **109.3.9 Special inspections.** For special inspections, see Section 1704.
- **109.3.10 Final inspection.** The final inspection shall be he made after all work required by the building permit is completed. as
- **109.4 Inspection agencies.** The building official is authorized .to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.
- **109.5 Inspection requests**. It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.
- **109.6 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

## SECTION 110 CERTIFICATE OF OCCUPANCY

- **110.1** Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.
- **110.2 Certificate issued.** After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the development services department, the building official shall issue a certificate of occupancy that contains the following:
  - 1. The building permit number.
  - 2. The address of the structure.
  - 3. The name and address of the owner.
  - 4. A description of that portion of the structure for which the certificate is issued.
  - 5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
  - 6. The name of the building official.
  - 7. The edition of the code under which the permit was issued.
  - 8. The use and occupancy, in accordance with the provisions of Chapter 3.
  - 9. The type of construction as defined in Chapter 6.
  - 10. The design occupant load.
  - 11. That an automatic sprinkler system is provided, if required.
  - 12. Any special stipulations and conditions of the building permit.
- **110.3 Temporary occupancy.** The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.

- **110.4 Revocation.** The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.
- **110.4.1 Temporary Certificate of Occupancy.** If the building official or building inspection manager finds no substantial hazard will result from occupancy of any building or portion thereof before the same is completed, a temporary certificate of occupancy may be issued for the use of a portion or portions of a building or structure prior to the completion of the entire building or structure provided the applicant agrees that:
  - 1. When construction is complete, final inspection will be requested and a certificate of occupancy issued.
  - 2. The applicant will state in writing the length of time the temporary certificate of occupancy is required. The length of time shall not exceed 180 days. The temporary certificate of occupancy will expire at the end of the time period stated in writing, at which time the power will be de-energized. The building official or building inspection manager may extend the temporary certificate of occupancy one time upon written request by the permittee or applicant, showing that circumstances beyond the control of the permittee or applicant, have prevented the completion of the project. Any extensions beyond the first will be taken on a case by case bases. The applicant must show the building official or building inspection manager substantial proof the project was unable to be completed within the requested time frame.
  - 3. It is the responsibility of the applicant to complete any required work prior to the expiration date of the temporary certificate of occupancy and call for a final inspection.
  - 4. The building official or building inspection manager may request the utility company to de-energize power, if required work is not completed on or before the expiration date of the temporary certificate of occupancy. This includes occupying the structure after the temporary certificate of occupancy has expired. The city of Scottsdale reserves the right to lien any property in violations of the provisions of this contract.
  - 5. Neither the City of Scottsdale nor the utility company will be held liable for any damages or delays, for deenergization of power.

Applicant must be the owner or authorized agent. If the owner is not available to provide signature on the application for temporary certificate of occupancy, then the owner shall provide a letter on company letterhead or notarized letter of authorization stating the name of person authorized to act on owner's or company's behalf. Refunds will be paid only to the owner/company listed on the application. Should information on the application change during the course of construction, it is the responsibility of the applicant to inform the city of Scottsdale of such changes so that records may be kept current.

For each Temporary Certificate of Occupancy issued, there will be required a refundable cash deposit or irrevocable letter of credit acceptable to the Inspection Services Director or City Attorney, paid to the city of Scottsdale to assure compliance to code and ordinance requirements. The amount of the cash deposit will be the same as the cost of a combination building, electrical, mechanical and plumbing permit fee as specified in Scottsdale Revised Code, Chapter 46, Article VII, or one thousand dollars (\$1,000.00), whichever is greater. For single family residential projects, the deposit shall be the same as the cost of a combination permit, or one thousand dollars (\$1,000.00), whichever is less.

- **110.4.2 Temporary Electrical Clearance Set In Permanent Position On Wall Of Building.** During construction, the Building Inspection Manager may issue a temporary electrical clearance for the purpose of providing lighting or for providing power to test equipment provided that the applicant agrees that:
  - 1. This clearance will not be construed as permission to occupy or use the premises in any other way than to complete construction and performance tests.
  - 2. When construction is complete, final inspections will be requested and a certificate of occupancy issued.
  - 3. The applicant will state in writing the length of time the temporary power is required. The temporary electrical clearance will expire at the end of the time period stated in writing, at which time the power will be de-energized. The building inspection manager may extend the time upon written request by the permittee or applicant, showing that circumstances beyond the control of the permittee or applicant have prevented the completion of the project.
  - 4. It is the responsibility of the applicant to complete any required work prior to the expiration date of the temporary electrical clearance and call for required inspections.

- 5. The building inspection manager may request the utility company to de-energize power at any time, when in the opinion of the building inspection manager, the energized system is used for purposes other than stated above. This includes occupying the structure under temporary power without a valid certificate of occupancy. The city of Scottsdale reserves the right to lien any property in violations of the provisions of this contract.
- 6. Neither the City of Scottsdale nor the utility company will be held liable for any damages caused by the deenergization of power for the reasons stated.

Applicant must be the owner or authorized agent. If the owner is not available to provide signature on the application for temporary electrical clearance, then the owner shall provide a letter on company letterhead or notarized letter of authorization stating the name of person authorized to act on owner's or company's behalf. Refunds will be paid only to the owner/company listed on the application. Should information on the application change during the course of construction, it is the responsibility of the applicant to inform the city of Scottsdale of such changes so that records may be kept current.

For each Temporary Electrical Clearance issued, there will be required a refundable cash deposit or irrevocable letter of credit acceptable to the Inspection Services Director or City Attorney, paid to the City of Scottsdale to assure the building is not occupied when power is being provided by a temporary electrical clearance. If the project is occupied, the deposit shall be forfeited and the power de-energized. The amount of the cash deposit will be the same as the cost of a combination building, electrical, mechanical, and plumbing permit fee, as specified in Scottsdale Revised Code. Chapter 46, Article VII, or one thousand dollars (\$1,000.00) whichever is greater. For single family residential projects, the deposit shall be the same as the cost of a combination permit or one thousand dollars (\$1,000.00), whichever is less. The building official may waive the refundable cash deposit requirement for single family residential projects that are enrolled in the Scottsdale Green Building program.

# SECTION 111 SERVICE UTILITIES

- **111.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until released by the building official.
- **111.2 Temporary connection.** The building official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power.
- 111.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The building official shall notify the serving utility, and wher- ever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

# SECTION 112 BOARD OF APPEALS

- **112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a Building Advisory Board Of Appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.
- **112.2** Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code.

The Building Advisory Board of Appeals shall have no authority relative to interpretation of the administrative provisions of this code nor shall the board be empowered to waive requirements of this code. Appeal cases appearing before the Building Advisory Board of Appeals shall be property specific and relate to projects having a building permit, pending permit application or a written violation notice.

**112.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

#### SECTION 113 VIOLATIONS

- **113.1** Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in con- flict with or in violation of any of the provisions of this code.
- **113.2 Notice of violation**. The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- **113.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.
- **113.4 Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.

## SECTION 114 STOP WORK ORDER

- **114.1 Authority**. Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the building official is authorized to issue a stop work order.
- **114.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.
- **114.3** Unlawful continuance. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

# SECTION 115 UNSAFE STRUCTURES AND EQUIPMENT

115.1 Conditions. Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

**115.2 Record.** The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

115.3 Notice. If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

115.4 Method of service. Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt re- quested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

115.5 Restoration. The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of Section 105.2.2 and Chapter 34.

## SECTION 116 CONSTRUCTION ACTIVITY

**116.1 Working Hours.** All building construction and associated work on private property shall not commence prior to one-half hour before sunrise nor continue after sundown. The record of the National Weather Service shall be used to determine the official time of these occurrences. Construction activity shall include any work requiring the use of manually operated or power assisted tools or equipment and vehicles used to excavate, erect or deliver materials associated with construction. The building official will issue a "stop work order" for all construction activity outside of the above prescribed time period.

The building official or building inspection manager may upon written request grant a variance from these times if just cause can be shown that work must be done outside the prescribed time period. The variance shall state the permit number, address, type of work, time period of the work and the duration of the variance. The party requesting the variance shall be responsible for notifying the adjacent property owners of intended work and duration of time.

These provisions are not intended to limit construction activity or construction related noises between sun-rise and sun-down.

**116.2 Dust, Dirt And Debris Control.** It shall be the responsibility of the property owner, the owner's appointed representative or contractor to control dust, dirt or debris created by construction in accordance with this section.

Provisions shall be made to keep the public way and all adjoining properties free of construction dirt, dust and debris created by workers or construction related vehicles. Dust may be controlled by providing a water truck during any portion of construction when dust is created, to keep all dirt sufficiently wet in order to minimize airborne dust. Dirt that has fallen into the public way or onto any adjacent property shall be immediately swept clean. Construction debris such as trash or scrap building materials, being blown or deposited into the public way or onto any adjacent property shall be immediately removed. An area on the construction site shall be provided where debris such as trash or scrap building materials can be stored until such material can be safely removed from the site.

When a complaint is received by the city regarding dirt, dust or debris associated with a construction site, the building inspection unit shall notify the property owner, appointed representative or contractor of the violation and issue a compliance notice stating the time period that the dirt, dust or debris must be removed. Non-compliance will result in the suspension of inspections at the construction site until the notice is complied with. The city shall not be held responsible for construction delays caused by non-compliance with these requirements."

# SECTION 117 REGISTERED FACILITIES

- **117.1 Definition.** For the purpose of this code, a registered facility is a firm, corporation, or political entity engaged in manufacturing, processing, or servicing which requires specialized facilities, utilities, and equipment to the extent that the facility maintains full-time personnel for the operation and maintenance of such facilities, utilities, and equipment and when such facility has complied with all the provisions of this section. A registered facility shall include industrial plants and health care facilities involved in the aforementioned activities. A registered facility shall not include retail operations.
- **117.2 Scope.** Registered facilities are exempt from Section 105 permits, for work regulated by this code when such work does not increase the floor area, height, or change the occupancy use, and is performed on existing buildings, structures, and associated utilities. This exemption is limited to buildings owned and/or leased, and under the direct control of the holder of the registration. The facility registration is not transferable and shall not be construed to waive any other provisions of this code.

The valuation of all work shall include costs for labor and material for architectural, structural, electrical, plumbing, and mechanical work. Contractor's profit should not be omitted.

- **117.3 Qualifications.** In addition to meeting the general definitions above, a registered facility shall have in its employ an engineer registered in the State of Arizona who shall be responsible for complying with the substantive provisions of this code.
- **117.4 Application and Fee.** Every applicant for facility registration shall file an application along with an application fee. The fee shall be Three Thousand dollars (\$3,000.).
- The building official shall review the application and notify the applicant accordingly. If the application is disapproved, the fee shall be refundable and the applicant may appeal from such decision to the Building Advisory Board of Appeals.
- **117.5 Registration Renewal.** Registrations shall be renewed each year by payment of the appropriate fee on or before December 31. Any work performed after December 31 without renewal or permits and inspections shall be a violation of this code.
- 117.6 Validity of Registration. Registration shall be valid only as long as the named engineer remains in the employ of the registrant in an active and full time capacity. If the registered engineer should leave the employ of the registrant, the registration shall be suspended until another registered engineer is assigned the responsibility for work done under the registration. The registrant shall notify the building official immediately and call for inspection of any work in progress in accordance with Section 305. Before any new work commences while registration is invalid or suspended, permit and inspections shall be obtained pursuant to this chapter.
- **117.7 Revocation of Registration.** The building official may suspend or revoke a registration when the registrant fails to comply with any of the registration responsibilities or for violation of any provision of this code. When the building official deems that the registration shall be suspended or revoked, The registrant will be notified in writing by certified mail at least seven days prior to suspension or revocation.

The registrant may appeal to the Building Advisory Board of Appeals within 30 days after notice of suspension or revocation.

- 117.8 Work Report and Inspections. A report of all work done under the facility registration shall be prepared by the registered engineer and submitted monthly to the building official together with plans and valuation of alterations to facilities covered under the code. The report shall be signed and sealed by the registrant and submitted even during months of inactivity.
- 117.9 Plans submitted pursuant to this section may be reviewed and inspection of the work conducted by the building official or authorized representatives as set forth in this code, provided, however, that work may proceed

without inspection pursuant to this section. The registrant may request a plan review or inspection of any work performed under this section without payment of additional fees.

**Exception**: Work reports need not be submitted for the following:

- 1. Installation of machines, equipment, and processes related to production or testing;
- 2. Repair of electrical, plumbing, or mechanical systems;
- 3. Movable cases, counters, and partitions not over 5 feet 9 inches high.

# SECTION 118 FIRE DAMAGED PROPERTY

**118.1 Assessment Required.** When the structural components of buildings have been subjected to fire, it is the responsibility of the owner to acquire an assessment of structural damage from a registered engineer or architect. The city can not provide an assessment of fire damaged property.

In every instance, a building permit will be required when building components, including electrical, plumbing, and mechanical systems are replaced. A plan will be required showing all structural and non-structural building components that are refurbished.

Structural calculations, including engineered truss design by an approved manufacturer, will be required for all structural replacements or modifications. All truss designs shall be keyed to the roof framing plan. The owner may be required to furnish calculations to substantiate the adequacy of charred or damaged structural framing. In computing the effective section modulus, the charred wood and 1/4 inch depth below the char shall be discounted. In addition, testing may be required for damaged masonry and structural steel.

**118.2 Required Upgrades.** When additions, alterations, or repairs within a twelve month period exceed fifty (50) percent of the existing building value, such building shall be made to conform to the requirements for new buildings.

**Exception**: Such building or structure shall be equipped with an approved fire sprinkler system when the work exceeds ten (10) percent of the value of an existing building of assembly use or twenty-five (25) percent of the value of an existing building or structure of other occupancies within a twelve month period.

# SECTION 119 PROTECTION FOR SHAFTS, PITS AND EXCAVATIONS

**119.1 Protection Required.** Every person owning or having charge of land upon which is located any abandoned swimming pool or any abandoned mining shaft, test hole, well, pit, or similar excavation which exceeds six (6) feet in any lateral dimension and three (3) feet in depth shall cover, fence securely, or provide some equivalent protection for the hazard and keep it so protected.

**119.2** The enclosure required in Chapter 31 for swimming pools shall be considered to meet the requirements for minimum equivalent protection.

#### **END OF ADMINISTRATIVE CHAPTER**

Section 310.1 revise to read as shown:

**308.2 Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 46 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Residential board and care facilities Assisted living facilities Halfway houses Group homes Congregate care facilities Social rehabilitation facilities Alcohol and drug centers Convalescent facilities

A facility such as the above with five or fewer persons shall may be classified as a Group R-3 or shall may comply with the *International Residential Code* in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 10 persons, shall be classified as Group R-4.

Section 310.1,R-3, revise to read as shown:

**R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I and where buildings do not contain more than two dwelling units as applicable in Section 101.2, or adult and child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours. Adult and child care facilities that are within a single-family home are permitted to comply with the *International Residential Code* In accordance with Section 101.2.

Group R-3 Care/assisted living occupancies in existing structures with one (1) to five (5) clients shall meet the following requirements:

- a. Interconnected smoke detectors shall be installed in all livable areas in accordance with City of Scottsdale building code.
- b. Posted evacuation map and emergency procedures, per fire department.
- c. Portable fire extinguishers in accordance with City of Scottsdale Fire Code.

Section 310.1,R-4, revise to read as shown:

**R-4** Residential occupancies shall include buildings arranged for occupancy as Residential Care/Assisted Living Facilities including more than five but not more than 46 10 occupants, excluding staff.

Group R-4 Care/assisted living occupancies in existing structures with six (6) to ten (10) clients and in all new structures clients shall meet the following requirements:

- a. Interconnected smoke detectors shall be installed in all livable areas in accordance with City of Scottsdale building code.
- b. Posted evacuation map and emergency procedures, per fire department.
- c. Portable fire extinguishers in accordance with City of Scottsdale Fire Code.
  - d. An automatic fire sprinkler system in accordance with City of Scottsdale Fire Code.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in this code or shall comply with the *International Residential Code* in accordance with Section 101.2.

Section 406.1.4 is amended to read as follows:

- **406.1.4 Separation.** Separations shall comply with the following:
  - 1. <u>In buildings not protected with an automatic fire sprinkler system</u>, The private garage shall be separated from the dwelling unit and its attic area by means of a minimum <sup>1</sup>/<sub>2</sub>-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated

from all habitable rooms above by not less than  $^5/_8$ -inch (15.9 mm) Type X gypsum board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than  $^1/_2$ -inch (12.7 mm) gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors, or solid or honeycomb core steel doors not less than  $1^3/_8$  inches (35 mm) thick, , or doors in compliance with Section 715.3.3. Doors providing opening protection shall be maintained self-closing and self-latching. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.

In buildings protected with an automatic fire sprinkler system, including the private garage, the separation shall be permitted to be limited to a minimum  $^{1}/_{2}$ -inch (12.7 mm) gypsum board applied to the garage side.

Items 2 and 3 are unchanged.

Section 508.9, Group U Carports, is added to read:

**508.9, Group U Carports.** Carports for other than single family residential use which are open on all sides and constructed entirely of noncombustible materials except for an approved fascia, shall not exceed three thousand (3,000) square feet and shall be located no closer than three (3) feet to an adjacent property line nor closer than six (6) feet to the furthest projecting element of a building or structure. The edge of the carport roof shall be used to measure the distance to property lines, buildings, and projecting elements of buildings or structures."

Section 704.11, Parapets, is amended by adding exception 7 as follows:

7. Two-hour fire-resistive exterior wall constructed entirely of non-combustible materials in a building equipped with an approved automatic sprinkler system. The wall shall terminate at the underside of roof sheathing and the entire building shall be provided with noncombustible roof covering."

Section 901.6.1, Automatic Sprinkler Systems, is amended to read:

**901.6.1 Automatic sprinkler systems.** Automatic sprinkler systems shall be monitored by an approved supervising station.

#### **Exceptions:**

- 1. A supervising station is not required for automatic sprinkler systems protecting one- and two family dwellings.
- 2. Limited area systems serving fewer than 20 sprinklers for E, H, and I occupancies, more than 100 sprinklers in all other occupancies.

Section 903.2, Automatic Sprinkler Systems, is amended to read:

**903.2 Where required.** An automatic sprinkler system shall be installed throughout all levels of all new Group A, B, E, F, H, I, M, R, S and U occupancies of more than zero (0) square feet. In accordance with section 903, and the Fire Department Interpretation and Applications Manual, and as set in this section."

1. In every story or basement of all buildings. Fire-resistive substitutions in accordance with provisions in the International Building Code, Chapter 6, footnote dare allowed for this subsection for Group R occupancies and for other occupancies,

provided that the automatic sprinkler is not otherwise required throughout the building by any other provision or section of the unamended building code.

- 2. At the top of rubbish and linen chutes and in their terminal rooms. Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Sprinkler heads shall be accessible for servicing.
- 3. In rooms where nitrate film is stored or handled. See also Section 409.
- 4. In protected combustible fiber storage vaults.
- 5. In any building that has a change in occupancy as defined in the building code.

# **Exception:** The following accessory structures shall be exempt from fire sprinkler requirements:

- 1. Gazebos and ramadas for residential and public use.
- 2. Independent rest room buildings that are associated with golf courses, parks and similar uses.
- 3. Guardhouses for residential and commercial developments.
- 4. Detached non-combustible carports for residential and commercial developments with covered parking less than 15,000 square feet (1394 m²).
- 5. Barns and agricultural buildings for private, residential, non-commercial use, not exceeding 1,500 square feet (139.35m²) with no habitable areas.
- 6. Detached storage sheds for private, residential, non-commercial use, not exceeding 1500 square feet (139.35m²).
- 7. Detached 1, 2 and 3 car garages (without habitable spaces) in existing R-3 developed parcels which contain existing non-sprinklered subdivision requirements (i.e. 700 foot (213.36m) hydrant spacing.
- 8. For fuel dispensing canopies not exceeding 1500 square feet (139.35 m<sup>2</sup>).
- 9. Open shade horse stalls of non-combustible construction for private, residential, non-commercial use, not exceeding 5,000 square feet (464.52 m²) and no storage of combustible products, vehicles, or agricultural equipment.
- 10. Detached one story accessory building used as tool and storage shed of non-hazardous materials, and not exceeding 200 square feet (11.15 m²).
- 11. Special use non-combustible structures as approved by the fire chief.

Section 903.2.1, Group A, is amended to read:

**903.2.1 Group A.** An automatic sprinkler system shall be installed throughout all Group A occupancies <u>in accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.</u>

Section 903.2.2, Group E, is amended to read:

**903.2.2 Group E.** An automatic sprinkler system shall be installed throughout all Group E occupancies <u>in accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.</u>

Section 903.2.3. Group F. is amended to read:

**903.2.3 Group F**. An automatic sprinkler system shall be installed throughout all Group F occupancies <u>in accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.</u>

Section 903.2.4, Group H, is amended to read:

**903.2.4 Group H**. An automatic sprinkler system shall be installed throughout all Group H occupancies <u>in accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.</u>

Section 903.2.5, Group I, is amended to read:

**903.2.5 Group I**. An automatic sprinkler system shall be installed throughout all Group I occupancies <u>in</u> accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and <u>Applications Manual</u>.

**Exception**: In jails, prisons and reformatories, the piping system may be dry, provided a manually operated valve is installed at a continuously monitored location. Opening of the valve will cause the piping system to be charged. Sprinkler heads in such systems shall be equipped with fusible elements or the system shall be designed as required for deluge systems in the Building Code.

Section 903.2.6, Group M, is amended to read:

**903.2.6 Group M.** An automatic sprinkler system shall be installed throughout all Group M occupancies <u>in accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and <u>Applications Manual.</u></u>

Section 903.2.7, Group R, is amended to read:

**903.2.7 Group R** An automatic sprinkler system shall be installed throughout all Group R occupancies <u>in accordance with NFPA 13, 13-R, or 13D Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.</u>

Section 903.2.8, Group S-1, is amended to read:

**903.2.8 Group S-1 occupancies.** An automatic sprinkler system shall be installed throughout all Group S-1 occupancies in accordance with NFPA 13 Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.

**903.2.8.1 Repair garages.** An automatic sprinkler system shall be installed throughout all repair garages in accordance with NFPA 13 Installation of Sprinkler Systems as modified by Fire Department Interpretation and Applications Manual.

Section 903.2.9, Group S-2, is amended to read:

**903.2.9 Group S-2 occupancies.** An automatic sprinkler system shall be installed throughout all Group S-2 occupancies in accordance with NFPA 13 Installation of Sprinkler Systems as modified by Fire Department Interpretation and Applications Manual.

**903.2.9.1 Commercial parking garages.** An automatic sprinkler system shall be installed throughout all commercial parking garages in accordance with NFPA 13 Installation of Sprinkler Systems as modified by Fire Department Interpretation and Applications Manual.

Section 903.2.10, All occupancies except Group R-3 and U, is amended to read:

**903.2.10** All Group R-3 and U occupancies. An automatic sprinkler system shall be <u>installed</u> throughout all Group R-3 and U occupancies in accordance with NFPA 13 or 13-D Installation of Sprinkler Systems and Fire Department Interpretation and Applications Manual.

Section 903.2.14, Group B, is added to read:

903.2.14 Group B occupancies. An automatic sprinkler system shall be installed throughout all Group B occupancies in accordance with NFPA 13 Installation of Sprinkler Systems as modified by Fire Department Interpretation and Applications Manual.

Section 903.2.15, Additions, alterations and repairs, is added to read:

<u>903.2.15 Additions, alterations and repairs.</u> When additions, alterations or repairs within a twelve month period exceed fifty (50) percent of the value of an existing building or structure, such building or structure shall be made to conform to the requirements for new buildings or structures.

**Exception:** Such building of structure shall be equipped with an approved fire sprinkler system when work exceeds ten (10) percent of the value of the existing building of assembly use or twenty-five (25) percent of the value of an existing building or structure of other occupancies."

903.2.15.1 Partial systems prohibited. In all new additions to existing non-sprinklered buildings and structures an automatic sprinkler system shall be installed in accordance with this section. There shall be no partially sprinklered compartments. Sprinklered and unsprinklered areas of a structure shall be separated in accordance with all applicable codes and standards.

Section 903.3.1.1, NFPA sprinkler systems, is amended to read:

**903.3.1.1 Sprinkler systems requirements**. Automatic sprinkler systems shall be <u>designed and installed</u> in accordance with NFPA 13, 13-R, 13-D 13 Installation of Sprinkler Systems as modified by Fire <u>Department Interpretation and Applications Manual.</u>

Section 903.3.6. Hose threads, is amended to read:

**903.3.6 Hose Threads.** Fire hose threads used in connection with automatic sprinkler system shall be National Standard Threads.

Section 903.3.7, Fire department connections, is amended to read:

**903.3.7 Fire department connections.** The location of fire department connections shall be approved by the building official fire chief.

Section 903.4, Sprinkler system monitoring and alarms, is amended to read:

**903.4 Sprinkler system monitoring and alarms**. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperature, critical air pressure and water-flow switches on all sprinkler systems shall be electrically supervised. See Fire Department Interpretation and Applications Manual.

#### **Exceptions:**

1. Automatic sprinkler systems protecting one- and two-family dwellings.

- 2. Limited area systems serving fewer than 20 <u>sprinklers for E, H, and I occupancies, more than 100</u> sprinklers in all other occupancies.
- 3. Automatic sprinkler systems installed in accordance with 13R where a common supply main is used to supply both domestic and automatic sprinkler systems and a separate shutoff valve for the automatic sprinkler system is not provided.
- 4. Jockey pump control valves that are sealed or locked in the open position.
- 5. Paint spray booths or dip tanks that are sealed or locked in the open position.
- 6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 7. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

Section 903.4.2, Alarms, is amended to read:

**903.4.2 Alarms**. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devise shall be activated by water flow equivalent the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. An interior alarm to alert the occupants shall be provided in the interior of the building in a normally occupied location when off-site monitoring is required. Where a fire alarm system is installed, activation of the automatic sprinkler system shall actuate the building fire alarm system.

Section 905.2. Installation standards, is amended to read:

**905.2 Installation standards.** Standpipe systems shall be installed <u>in accordance with this section as</u> modified by Fire Department Interpretation and Applications Manual.

Section 905.3.1.1, Building area, is added to read as follows:

905.3.1.1 Building area. In buildings exceeding 10,000 square feet (929 m²) in area per story, Class I automatic wet standpipes shall be provided and where any portion of the building's interior area is more than 200 feet (60.96 m) of travel, vertically and horizontally, from the nearest point of fire department vehicle access. See Fire Department Interpretation and Applications Manual.

#### **Exceptions:**

- 1. Single story structures are not required to have hose connections, except in those interior portions of the building that exceed 200 feet (60.96 m) of travel from an emergency access road.
- 2. Required wet standpipes may be an integral part of an approved sprinkler system and may be connected to the sprinkler systems horizontal cross mains. Calculations for required fire flow shall be submitted with sprinkler plans.
- 3. Unless required by Fire Department Interpretation and Applications Manual hose connection is not required in Group R-3 occupancies."

Section 905.3.4, Stages, is amended to read:

**905.3.4 Stages.** Stages greater than 1,000 square feet in area (93 m²) shall be equipped with a Class ## wet standpipe system with 4.5 inch and 2.5 inch (64 mm) hose connections on each side of the stage.

**Exception:** Where the building or area is equipped throughout with an automatic sprinkler system, the hose connections are allowed to be supplied from the automatic sprinkler system and shall have a flow rate of not less than that required by NFPA 14 for Class I III standpipes.

Section 905.3.4.1, Hose and cabinet, is deleted.

Section 907.2, Where required, is amended to read:

**907.2 Where required.** An approved manual, automatic, or manual and automatic fire alarm system shall be provided in accordance with Sections 907.2.1 through 907.2.23 and Fire Department Interpretation and Applications Manual. Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 and Fire Department Interpretation and Applications Manual is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required. An approved automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances and equipment shall comply with Section 907.1.2. The automatic fire detectors shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms where, during normal operation, products of combustion are present in sufficient quantity to actuate a smoke detector.

Section 907.6, Activation, is amended to read:

**907.6 Activation.** Where an alarm notification system is required by another section of this code, it shall be activated by:

- 1. Required automatic fire alarm system.
- 2. Sprinkler water-flow devices.
  - <u>a. Multilevel structures. All multilevel structures are required to have a flow switch and tampered control valve per floor.</u> See Fire Department Interpretation and Applications Manual.

**Exception:** Group R-1 and R-2, occupancies with a domestic water supply serving 6 units or less and Group R-3. See Fire Department Interpretation and Applications Manual.

3. Required manual fire alarm boxes."

Section 1004.3 is amended to read:

**1004.3 Posting of occupant load.** Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access door-way from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or authorized agent. The sign shall be printed in letters at least three-quarters (3/4) inch high on a contrasting background and read: "Maximum Occupant Load ----- People". The number of people occupying the room shall not exceed the maximum occupant load as posted on the sign.

Section 1008.1.4, Exception 3, is amended to read:

**Exception 3:** In Group R-3 occupancies, the landing at an exterior doorway shall not be more than 7 \(\frac{4}{4}\) inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.

Section 1008.1.6, Exception, is amended to read:

**Exception:** The threshold height shall be limited to  $\frac{7 \cdot 4}{4}$  inches (197 mm) where the occupancy is R-2 or R-3 as applicable in Section 101.2, the door is an exterior door that is not a component of the required means of egress and the doorway is not on an accessible route.

Section 1101 is amended to read as shown:

#### SECTION 1101 GENERAL

**1101.1 Scope.** The provisions of this chapter shall control the design and construction of facilities for accessibility to physically disabled persons.

**1101.2 Design.** Buildings and facilities shall be designed and constructed to be accessible in accordance with this code Arizona Revised Statutes Section 41-1492.03 (the Arizonans with Disabilities Act), R 10-3-403 and R 10-3-404, which includes -28 CFR Part 35, and 28 CFR 36 and the -Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG), and ICC/ANSI A117.1.

The Arizona Revised Statutes Section 41-1492.03 (the Arizonans with Disabilities Act), R 10-3-403 and R 10-3-404, which includes -28 CFR Part 35, and 28 CFR 36 and the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG) shall govern where it varies from the requirements of this code.

Section 1107.6.2.1.2 Type B units, is amended to read as shown:

**1107.6.2.1.2 Type B units.** Where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure on a single site , every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Section 1204.1 is amended to read as shown:

**1204.1 Equipment and systems.** Interior spaces intended for human occupancy shall be provided with active or passive space heating heating and cooling systems capable of maintaining a minimum indoor temperature of between 68°F (20°C) and 80°F at a point 3 feet (914 mm) above the floor on the design heating day.

**Exception:** Interior spaces where the primary purpose is not associated with human comfort.

Section 1203.4.1.1, Adjoining Spaces, is amended by adding the following sentence:

Bathrooms, kitchens and laundry rooms are not permitted to be ventilated through an adjoining room. Exhaust must be directly to the exterior.

Section 1209.2, Attic Spaces, is amended by adding the following sentence:

The opening shall be located in a corridor, hallway or other readily accessible location.

Section 1502.1, Definition of the following term is added to read:

**FELT.** A matted organic or inorganic fibers, saturated or coated with bituminous compound meeting ASTM standards for felt roofing materials.

Section 1607.11.2.1, Flat, pitched and curved roofs, add footnote a. to read:

 $R_2$  = 1.2 – 0.05 F for 4<F<12 (Equation 16-29)  $\frac{a}{a}$  For light frame construction 3 stories or less with a slope equal to 4/12 or greater,  $R_2$  may be used as 0.8.

Section 1612.3, Establishment of flood hazard areas, is revised to read:

1612.3 Basis for establishment of special flood hazard areas and regulatory floodways. (Scottsdale revised code, Sec. 37-18).

1612.3.1 The city is a participant in the National Flood Insurance Program (NFIP). The special flood hazard areas and the parts of those areas which are designated as regulatory floodways are identified and delineated by the federal emergency management agency (FEMA) in an engineering report titled "Flood Insurance Study, Scottsdale, Arizona" with accompanying flood insurance rate maps (FIRM) and flood hazard boundary maps (FHBM). Such studies and maps are prepared for communities participating in the NFIP. The first study and maps for Scottsdale were dated June 1972, and there have been several revisions. The current flood insurance study and flood insurance rate maps for Scottsdale are on file at the city records department, and they are hereby adopted by reference and declared to be a part of this article.

1612.3.2 A special flood hazard area shall be those areas of the city identified on the FIRM including, but not limited to, zone A, zone A1-30, zone AE, zone AO, zone AH, zone A99, and zone E; and those areas which have been identified by the floodplain administrator, adopted by the floodplain board, and have been delineated in accordance with Arizona Revised Statutes, sections 48-3609 and 48-3610; and which are compatible with criteria developed by the state director of water resources for defining the extent of flooding and the base flood water surface elevations.

1612.3.3 The regulatory floodways shall be those areas of the city identified on the FIRM as flood hazard zones, including, but not limited to, zone AE, and zone A.

Section 1612.4, Design and Construction, is revised to read:

1612.4 Design and Construction. If a development is proposed on land designated as a special flood hazard area, the development shall be designed and constructed in a manner which complies with the requirements in Scottsdale revised code, section 37 and in a manner which raises the developed land to an elevation which is at or above the regulatory base floodwater surface elevation.

Section 1612.5, Flood hazard documentation, is revised to read:

1612.5 Flood hazard documentation. Upon completion of the grading and flood protection features of the development, the developer shall provide the floodplain administrator as-built grading plans and other engineering data prepared and signed by a professional engineer or registered land surveyor, which demonstrates compliance with Scottsdale revised code, section 37

Section 1704.5, Masonry construction, is amended by adding the following exceptions:

- 3. Masonry fences six feet or less in height above grade.
- 4. Masonry retaining walls four feet or less in height from bottom of footing to top of wall unless supporting a surcharge or impounding flammable liquids.
- 5. Masonry walls 10 feet or less in height and fireplaces of one and two family dwellings when designed at ½ stress.

Section 1704.5.2, Engineered masonry in nonessential facilities, is amended by adding the following exception:

**Exception:** When quality assurance provisions do not include requirements for special inspection as prescribed in Section 1704.5, the allowable stresses for masonry in Section 2107 shall be reduced by one half. The following limitations shall apply to this exception.

- 1. The maximum unsupported height (or length) to width (nominal) ratio of a building wall is limited to 20.
- 2. The maximum soil retaining for a retaining wall is 4'-0" from the top of footing for an 8 inch wall or 6'-0" for a 12 inch wall.
- 3. The maximum height to width ratio of 10 for a cantilevered fence or combination fence and retaining wall as determined from the top of footing to the top of wall.

Section 1704.13, Special cases for Special Inspections, is amended by adding:

- 4. Wood panelized roof construction.
- 5. Complex Electrical Installations."
- 6. Medical Gas Installations in health care facilities as required by Uniform Plumbing Code, Appendix F. (Credentials of third party inspection agency shall be approved by the Building Official)"

Table 1805.4.2, Footings supporting walls of light-frame construction, is amended by adding footnote "h":

h. Isolated columns carrying loads in excess of 750 lbs shall be supported on minimum 4 square feet of footing, with minimum width of 24 inches. Maximum bearing pressure from service loads shall not exceed 1500 psf unless recommended by the soils report.

Section 2107.2.3, Lap splices, is amended to read:

**2107.2.3 ACI 530/ASCE 5/TMS 420, Section 2.1.8.6.1.1, lap splices.** The minimum length of lap splices for reinforcing bars in tension or compression, *Id*, shall be calculated by Equation 21-2 as required by ACI 530/ASCE 5/TMS 402, but shall not be less than 15 inches (380 mm).

Section 2114, Clean Burning Fireplaces, is added to read:

# **2114 CLEAN BURNING FIREPLACES.**

The purpose of this Standard is to regulate fireplaces, woodstoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

The effective date of the regulations and prohibitions set forth in this Standard shall take effect on December 31, 1998.

Definitions: For purposes of this Standard, the following words and terms shall be defined as follows:

FIREPLACE means a built in place masonry hearth and fire chamber or a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

SOLID FUEL includes but is not limited to wood, coal, or other nongaseous or non-liquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood-burning devices.

WOODSTOVE means a solid-fuel burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

#### **Installation Restrictions:**

- a) On or after the effective date, no person, firm or corporation shall construct or install a fireplace or a woodstove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a woodstove, unless the fireplace or woodstove complied with one of the following:
  - 1. A fireplace which has a permanently installed gas or electric log insert.
  - 2. A fireplace, woodstove, or other solid-fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.
  - 3. A fireplace, woodstove or other solid-fuel burning appliance which has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations part 60, Subpart AAA as in effect on July 1, 1990.
  - 4. A fireplace, woodstove or other solid-fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations part 60, Subpart AAA as in effect on July 1, 1990.
  - 5. A fireplace which has a permanently installed woodstove insert which complies with subparagraphs 2, 3, or 4 above.
- b) The following installations are not regulated by this Standard and are not prohibited by this Standard:
  - 1. Furnace, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.
  - 2. Cook-stoves, barbecue grills, and similar appliances designed primarily for cooking.
  - 3. Fire pits, barbecue grills, and other outdoor fireplaces.

#### Fireplace or Woodstove Alterations Prohibited:

- a) On or after the effective date, no person, firm or corporation shall alter or remove a gas or electric log insert or a woodstove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.
- b) On or after the effective date, no person, firm or corporation shall alter a fireplace, woodstove or other solid fuel burning appliance in any manner that would void it's certification or operational compliance with the provisions of this Standard.

# Permits Required:

In addition to the provisions and restrictions of this Standard, construction, installation or alternation of all fireplaces, woodstoves and other gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the Construction Code and shall be subject to the permits and inspections required by the Construction Code.

Section 2308.9.2, Framing Details, is amended by adding the following paragraph:

Bearing frame walls shall have a framing anchor/tie down connector at every other stud to top and bottom plates, unless wall is sheathed with structural paneling which extends from bottom to top plates with nailing per Table 2304.9.1. Framing anchors, mechanical fasteners and/or structural sheathing shall be installed to provide continuous ties from the roof to the foundation system.

Section 3109 Swimming Pool Enclosures, is revised to read:

# SECTION 3109 SWIMMING POOL ENCLOSURES

### Section 3109.1 - GENERAL

419.1 Scope. The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

<u>Section 3109.2 Standards of Quality.</u> In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements for pool and spa safety covers as listed below. The standard listed below is a recognized standard. (See Section 3504.)

1. ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

## Section 3109.3 - DEFINITIONS

For the purpose of this section, certain terms, words and phrases are defined as follows:

ABOVEGROUND/ON-GROUND POOL. See definition of "swimming pool."

**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

GRADE is the underlying surface, such as earth or a walking surface.

**HOT TUB.** See definition of "spa, non-self-contained" and "spa, self-contained."

IN-GROUND POOL. See definition of "swimming pool." SEPARATION FENCE is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

**SPA, NONSELF-CONTAINED,** is a hydro-massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A non-self-contained spa is intended for recreational bathing and contains water over **18** inches ( **457** mm) deep.

SPA, SELF-CONTAINED, is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 24 inches (610 mm) deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over **18** inches ( **457** mm) deep. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools.

**SWIMMING POOL, INDOOR,** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR,** is any swimming pool that is not an indoor pool.

<u>Section 3109.4 - Requirements Outdoor Swimming Pool.</u> An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least **60** inches ( **1524** mm) above grade measured on the side of the barrier that faces away from the swimming pool. The top of a barrier that separates the pool only from habitable spaces on the same property shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 45 inches (1143 mm) apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

Where common fences on adjacent property lines of existing developed lots serve as the barrier, the height may be measured on the side that faces the swimming pool. The pool side of the barrier shall be not less than 20 inches from the edge of the water.

2. Openings in the barrier shall not allow passage of a 13/4-inch-diameter (44.5 mm) sphere.

#### **Exceptions:**

- 1. When vertical spacing between such openings is 45 inches (1143 mm) or more, the opening size may be increased such that the passage of a 4-inch-diameter (102 mm) sphere is not allowed.
- 2. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 45 inches (1143 mm) or more.
- 3. Chain link fences used as the barrier shall not be less than 11 gage.
- 4. Where access gates are provided, they shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self- latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.

5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section 421.1 shall be provided.

**Exception:** One of the following may be used in lieu of a separation fence:

- 1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.
- 2. An alarm installed on all doors with direct access to the pool.
- The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dba when measured indoors at 10 feet (3048 mm). The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.
- 3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
- 6. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.
- 7. A pool safety cover which complies with ASTM F 1346-91 may be used to meet the requirements of Items 1 through 6 above for barrier protection between the dwelling unit and swimming pool provided all other portions of the perimeter fencing around the yard are installed and maintained as required. If switching devices are used for operation of the pool safety cover, they shall be key-operated, locked away, or otherwise located in an inaccessible location. An inaccessible location shall be at a height of at least 54 inches above the deck or adjacent ground level and where the entire pool can be visually inspected during cover operation.
- 8. The building official may grant an exception to the above barrier requirements when it is determined that there is a natural barrier existing on the premises in the form of thorny/spiny vegetation, landscaping, or topography which prevents access to the pool area. An exception may also be granted for barrier protection between the dwelling unit and swimming pool when such protection precludes access by a disabled adult resident.

<u>Section 3109.5 Requirements Indoor Swimming Pool.</u> For an indoor swimming pool, protection shall comply with the requirements of Section 3109.4, Item 5.

<u>Section 3109.6 Spas and Hot Tubs.</u> For a non-self-contained and self-contained spa or hot tub, protection shall comply with the requirements of Section 3109.4.

**Exception:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 3109.4.

Section 3109.7 Responsibility of Builder/Installer. In the case of new swimming pool, spa, or hot tub construction, it shall be the responsibility of the builder/installer to inform the pool owner of the above barrier requirements. Violations shall be remedied in accordance with Section 31-33 of the Scottsdale Revised Code.

<u>Section 3109.8</u> Responsibility of Owner/Tenant. It is the responsibility of the property owner and any other person in responsible charge of a swimming pool to ensure that the required swimming pool barrier, including all gates, doors, locks, alarms, and latches are maintained in safe and good working

order at all times. No person shall alter or remove any portion of a swimming pool barrier except to repair, reconstruct, or replace the barrier in compliance with the provisions of this chapter.

Section 3109.9 Nuisance and Property Maintenance. Swimming pools, spas, and hot tubs constructed after the enactment of this chapter which are not enclosed or protected by a barrier as required in Section 3109.4 are hereby declared to be unsafe and nuisance, and shall be resolved by the Code Enforcement Unit of the Citizen & Neighborhood Resources Department under the procedures outlined in Chapter 18 of the Scottsdale Revised Code."

Section 3303.1 Construction documents is revised to read:

**3303.1 Construction documents.** Construction documents and a schedule for demolition must be submitted when required by the building official. Where such information is required, no work shall be done until such construction documents or schedule, or both, are approved.

As used in this code, the term "demolition" means the removal of a building or structure, or any portion thereof. Demolition work includes interior demolition prior to or incidental to remodeling or renovation work.

A demolition permit shall be obtained from the Building Official prior to beginning any interior or exterior demolition of any building or structure. The fee for a demolition permit shall be as set forth in Fees for each permit shall be paid as set forth in Scottsdale Revised Code Chapter 46, Article VII.

**Exception:** Demolition work may be included as part of the work authorized by any building permit provided no demolition work begins prior to obtaining said building permit.

Exterior demolition work shall be adequately kept wet as demolition progresses to minimize dust. All debris shall be entirely removed from the lot after demolition. Any excavation remaining after debris removal shall be completely filled or protected as required by this code.

The use of public property and the protection of pedestrians and the general public during demolition shall be as specified in Section 3306. Demolition sites shall be kept secured from public entry at all times."

Section 3403, Additions, Alterations or Repairs, is amended by adding Section 3403.5:

"When additions, alterations, or repairs within a twelve-month period exceed fifty (50) percent of the value of an existing building or structure, such building or structure shall be made to conform to the requirements for new buildings or structures.

**Exception:** Such building or structure shall be equipped with an approved fire sprinkler system when the work exceeds ten (10) percent of the value of an existing building of assembly use or twenty-five (25) percent of the value of an existing building or structure of other occupancies.

Such building or structure that has a change of occupancy as defined in the Building Code shall be equipped with an approved fire sprinkler system.

2) The International Residential Code, 2003 Edition, adopted by section 31-31 is amended in the following respects:

Delete Chapter 1, Administration, and substitute the following:

Refer to Chapter one of the amended International Building Code, 2003 Edition, for administrative provisions.

**Appendices.** Provisions in the appendices shall not apply unless specifically referenced in the adopting ordinance. The following appendices are adopted:

APPENDIX A SIZING AND CAPACITIES OF GAS PIPING

APPENDIX B SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE AND TYPE B VENTS APPENDIX C EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS

APPENDIX D RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING

APPLIANCE INSTALLATION

APPENDIX G SWIMMING POOLS, SPAS AND HOT TUBS

APPENDIX H PATIO COVERS

APPENDIX J EXISTING BUILDINGS AND STRUCTURES

APPENDIX K SOUND TRANSMISSION

Section R201.4 is amended to read as follows:

**R201.4 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies. Webster's Third New International Dictionary of the English Language, Unabridged, shall be considered as providing ordinarily accepted meanings.

Section R301.1 is amended to read as follows:

**R301.1.1 Alternative provisions.** As an alternative to the requirements in Section R301.1 <u>with prior approval of the building official</u> the following standards are permitted subject to the limitations of this code and the limitations therein. Where engineered design is used in conjunction with these standards the design shall comply with the *International Building Code*.

- 1. American Forest and Paper Association (AF&PA) Wood Frame Construction Manual (WFCM).
- 2. American Iron and Steel Institute (AISI), Standard for Cold-Formed Steel Framing-Prescriptive Method for One- and Two-family Dwellings (COFS/PM).

Complete Table R301.2(1) as follows:

The requirements of IRC Table R301.2(1) are as follows:

Ground snow load: 0
Wind speed: 90
Seismic design category: C

Weathering : negligible Frost line depth : negligible 12 inches

Termite: moderate to heavy
Decay: none to slight
Winter design temp: 34 degrees

Delete all other headings

Revise Table R301.5 as follows:

# TABLE R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (In pounds per square foot)

(iii podiido pei oquaie ioot)	
USE	<u>LIVE</u>
Attics with storage b,e	<u>40</u>
Sleeping rooms	<u>40</u>

#### All other values to remain unchanged.

Section R303.2, Adjoining rooms, is amended by adding the following sentence:

Bathrooms, kitchens and laundry rooms are not permitted to be ventilated through an adjoining room. Exhaust must be directly to the exterior.

Section R303.3 is amended to read as follows:

**R303.3 Bathrooms.** Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.279 m2), one-half of which must be openable. A mechanical ventilation system shall be provided. The minimum ventilation rates shall be 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

**Exception:** The glazed areas shall not be required where artificial light and a mechanical ventilation system are <u>is</u> provided. The minimum ventilation rates shall be 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

Section R303.8 is amended to read as follows:

**R303.8 Equipment and systems.** Interior spaces intended for human occupancy shall be provided with active or passive space-heating heating and cooling systems capable of maintaining a minimum indoor temperature of between 68°F (20°C) and 80°F at a point 3 feet (914 mm) above the floor on the design heating day.

**Exception:** Interior spaces where the primary purpose is not associated with human comfort. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

Section R305.1 is amended to read as follows:

**R305.1 Minimum height.** Habitable Rooms shall have a ceiling height of <u>7 feet 6 inches (2286 mm)</u>. Hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than 7 feet (2134 mm).

#### **Exceptions:**

- 1. Beams and girders spaced not less than 4 feet (1219 mm) on center may project not more than 6 inches (152 mm) below the required ceiling height.
- 2. Ceilings in basements without habitable spaces may project to within 6 feet, 8 inches (2032 mm) of the finished floor; and beams, girders, ducts or other obstructions may project to within 6 feet, 4 inches (1931 mm) of the finished floor.

Not more than 50 percent of the required floor area of a room or space is permitted to have a sloped ceiling less than 7 feet (2134 mm) in height with no portion of the required floor area less than 5 feet (1524 mm) in height.

4. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) over the fixture and at the front clearance area for fixtures as shown in Figure R307.2. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

Section R309.1 is amended to read as follows:

**R309.1 Opening protection.** Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1<sup>3</sup>/<sub>8</sub> inch (35 mm) in thickness, solid or honeycomb core steel doors not less than 1<sup>3</sup>/<sub>8</sub> inches (35 mm) thick, or 20-minute fire-rated doors. Doors providing opening protection shall be maintained self-closing and self-latching.

Section R309.2 is amended to read as follows:

**R309.2 Separation required.** The garage shall be separated from the residence and its attic area by not less than  $^{1}/_{2}$ -inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than  $^{5}/_{8}$ -inch (15.9 mm) Type X gypsum board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than  $^{1}/_{2}$ -inch (12.7 mm) gypsum board or equivalent.

In buildings protected with an automatic fire sprinkler system, including the private garage, the separation shall be permitted to be limited to a minimum  $\frac{1}{2}$ -inch (12.7 mm) gypsum board applied to the garage side.

Section R310.1 is amended by adding the following sentence:

Such openings shall open directly into a public street, public alley, yard or court. The access route to the emergency escape and rescue opening shall comply with the requirements of Section R310.

Section R311.4.3, Landings at doors, is amended to read as follows:

**R311.4.3 Landings at doors.** There shall be a floor or landing on each side of each exterior door.

**Exception:** Where a stairway of two or fewer risers is located on the exterior side of a door, other than the required exit door, a landing is not required for the exterior side of the door.

The floor or landing at the exit door required by Section R311.4.1 shall not be more than 1.5 inches (38 mm) lower than the top of the threshold. The floor or landing at exterior doors other than the exit door required by Section R311.4.1 shall not be required to comply with this requirement but shall have a rise no greater than that permitted in Section R311.5.3 4 inches (101 mm).

**Exception:** The landing at an exterior required exit doorway shall not be more than 7 \(\frac{3}{4}\) inches (196 mm) 4 inches (101 mm) below the top of the threshold, provided that the door, other than an exterior storm or screen door, does not swing over the landing.

The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

Section R313.1 is amended by adding the following item:

4. Where the ceiling height of a room open to the hallway servicing bedrooms exceeds that of the opening to the hallway by 24 inches or more, smoke detectors shall be installed in the hallways and in the adjacent room.

Section R317.1 is amended to read as follows:

**R317.1 Two-family dwellings.** Dwelling units in non-sprinkled two-family dwellings shall be separated from each other by wall and/or floor assemblies having not less than 1-hour fire-resistive rating when tested in accordance with ASTM E 119. Fire-resistance rated floor-ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend to the underside of the roof sheathing.

**Exception:** A fire resistance rating of ½ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13 the fire code, the separation between residences and between their attic areas shall be by not less than 1/2-inch (12.7 mm) gypsum board applied to each side.

**R317.1.1 Supporting construction.** When floor assemblies are required to be fire-resistance-rated by Section R317.1, the supporting construction of such assemblies shall have an equal or greater fire-resistive rating.

Section R320.1 Subterranean termite control. is amended to read as follows:

R320.1 Subterranean termite control. In areas favorable to termite damage as established by Table R301.2(1), the City of Scottsdale methods of protection shall be by chemical soil treatment, pressure preservatively treated wood in accordance with the AWPA standards listed in Section R323.1, naturally termite-resistant wood or physical barriers (such as metal or plastic termite shields), or any combination of these methods.

Add Section R324 as follows:

R324 Automatic Fire-extinguishing Systems. In all occupancies an automatic sprinkler system shall be installed in accordance with the city fire code:

#### **Exceptions:**

- 1. Gazebos and ramadas for residential and public use.
- 2. Independent restroom buildings that associated with golf courses, parks and similar uses.
- 3. Guardhouses with 120 square feet or less floor area for residential and commercial developments.
- 4. Detached carports for residential developments.
- 5. Barns and agricultural buildings for private, residential, non-commercial use, not exceeding 1500 square feet.

- 6. Detached storage sheds for private, residential, non-commercial use, not exceeding 1500 square feet.
- 7. Detached 1, 2 and 3 car garages (without habitable spaces) in existing R-3 developed parcels which contain existing non-sprinklered sub-division requirements (i.e. 700 foot hydrant spacing).

  8. For fuel dispensing canopies see the Fire Code.
- 9. Open shade horse stalls of non-combustible construction for private, residential, non-commercial use, not exceeding 5,000 square feet and no storage of combustible products, vehicles or agricultural equipment.
- 10. Additions, alterations, or repairs of existing unsprinkled buildings or structures when the value of work is ten (10) percent or less of the value of an existing building of assembly use or twenty-five (25) percent or less of the value of an existing building or structure of other occupancies within a twelve month period.

Table R403.1 is revised to read as follows:

TABLE R403.1 MINIMUM WIDTH OF CONCRETE FOOTINGS (inches)<sup>1, 2, 3</sup>

	LOAD-BEARING VALUE OF SOIL (psf)							
	<del>1,500</del>	<del>2,000</del>	<del>-2,500</del>	3,000	<del>-3,500</del>	<del>-4,000</del>		
Convention	Conventional light-frame construction							
<del>1-story</del>	<del>-16</del>	<del>-12</del>	<del>10</del>	-8	<del>-7</del>	<del>-6</del>		
<del>2-story</del>	<del>-19</del>	<del>-15</del>	<del>-12</del>	<del>-10</del>	-8	<del>-7</del>		
<del>3-story</del>	<del>22</del>	<del>-17</del>	14	11	<del>-10</del>	<del>-0</del>		
4-inch brick veneer over light frame or 8-inch hollow concrete masonry								
<del>1 story</del>	<del>19</del>	<del>-15</del>	<del>12</del>	<del>-10</del>	8	7		
<del>2 story</del>	<del>25</del>	<del>19</del>	<del>15</del>	<del>13</del>	<del>11</del>	<del>10</del>		
<del>3 story</del>	<del>31</del>	<del>23</del>	<del>-19</del>	<del>-16</del>	<del>13</del>	<del>-12</del>		
8-inch solid or fully grouted masonry								
<del>1-story</del>	<del>22</del>	<del>17</del>	<del>-13</del>	11	<del>-10</del>	9		
<del>2-story</del>	<del>31</del>	<del>-23</del>	<del>19</del>	<del>-16</del>	<del>13</del>	<del>-12</del>		
<del>3-story</del>	40	<del>30</del>	24	<del>20</del>	<del>-17</del>	<del>15</del>		

Number of Floors Supported by the Foundation. <sup>3</sup>	Thickness of Foundation Wall (inches - Nominal Dimension) Stud Wall			of Footing (W) ches)	F	kness of poting nches)	Undis	oth Below turbed Soil nches)
	Concrete	Unit Masonry	Stud Wall <sup>1</sup>	Masonry Wall	Stud Wall	Masonry Wall	Stud Wall	Masonry Wall
1	6	6	16	16	6	8	18	18
2	8	8	16	20	8	8	18	18

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m2.

- Interior stud bearing walls may be supported by isolated footings. The footing width and length shall be twice the width shown in this table and the footings shall be spaced not more than 6 feet (1.829mm) on center.
- A minimum of two (2) #4 reinforcing bars (minimum grade 40) are required in the footing/stem concrete. If metal hold downs are used, one #4 horizontal reinforcing bar must be placed within the top 6" of the stem wall.
- Foundations may support a roof in addition to the stipulated number of floors. Foundations supporting roofs only shall be as required for supporting only one floor.
- 4. Isolated columns carrying loads in excess of 750 lbs shall be supported on minimum 4 square feet of footing, with minimum width of 24 inches. Maximum bearing pressure from service loads shall not exceed 1500 psf unless recommended by the soils report.

Revise figure R403.1.7.1 as follows:

Replace figure R403.1.7.1 Foundation clearances from slopes with IBC figure 1805.3.1 foundation clearances from slopes.
Revise Top of Slope Note to read:

H/3 or 1.5 times footing width (whichever is greater,) but need not exceed 40 ft. max.

Section R403.1.9 is added to read as follows:

<u>Section R403.1.9 Pipes through footings or foundation walls.</u> Any pipe that passes under a footing or through a foundation wall shall be provided with a relieving arch; or there shall be built into the masonry wall a pipe sleeve two pipe sizes greater than the pipe passing through.

Section R602.3.2 is amended to read as follows:

**R602.3.2 Top plate.** Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates shall be offset at least 24 inches (610 mm) 48 inches (1220 mm). Plates shall be a nominal 2 inches in depth (51 mm) and have a width at least equal to the width of the studs.

Figure R602.3(2)FRAMING DETAILS, the note in the upper right corner is revised to read:

STAGGER JOISTS 24 IN. JOINTS 48 IN. OR USE SPLICE PLATES- SEE SECTION R602.3.2

Table R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS, under the column entitled "DESCRIPTION OF BUILDING ELEMENTS", change the tenth line to read:

Double top plates, minimum 24-inch offset of end joints, face nail in lapped area

Revise Table R702.3.5 as follows:

In column with heading "THICKNESS OF GYPSUM BOARD (inches)", Delete reference to 3/8.

Add Section R1000, Clean Burning Fireplaces, to read:

**SECTION R1000** 

#### **CLEAN BURNING FIREPLACES**

R1000.1 Clean Burning Fireplaces. The purpose of this Standard is to regulate fireplaces, woodstoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

The effective date of the regulations and prohibitions set forth in this Standard took effect on December 31, 1998.

Definitions: For purposes of this Standard, the following words and terms shall be defined as follows:

FIREPLACE means a built in place masonry hearth and fire chamber or a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

SOLID FUEL includes but is not limited to wood, coal, or other nongaseous or non-liquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood-burning devices.

WOODSTOVE means a solid-fuel burning heating appliance including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

#### **Installation Restrictions:**

- a) On or after the effective date, no person, firm or corporation shall construct or install a fireplace or a woodstove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a woodstove, unless the fireplace or woodstove complied with one of the following:
  - 1. A fireplace which has a permanently installed gas or electric log insert.
  - 2. A fireplace, woodstove, or other solid-fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.
  - 3. A fireplace, woodstove or other solid-fuel burning appliance which has been tested and listed by a nationally recognized testing agency to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations part 60, Subpart AAA as in effect on July 1, 1990.
  - 4. A fireplace, woodstove or other solid-fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations part 60, Subpart AAA as in effect on July 1, 1990.
  - 5. A fireplace which has a permanently installed woodstove insert which complies with subparagraphs 2, 3, or 4 above.
- b) The following installations are not regulated by this Standard and are not prohibited by this Standard:
  - 1. Furnace, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.
  - 2. Cook-stoves, barbecue grills, and similar appliances designed primarily for cooking.
  - 3. Fire pits, barbecue grills, and other outdoor fireplaces.

#### Fireplace or Woodstove Alterations Prohibited:

- a) On or after the effective date, no person, firm or corporation shall alter or remove a gas or electric log insert or a woodstove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.
- b) On or after the effective date, no person, firm or corporation shall alter a fireplace, woodstove or other solid fuel burning appliance in any manner that would void it's certification or operational compliance with the provisions of this Standard.

### Permits Required:

In addition to the provisions and restrictions of this Standard, construction, installation or alternation of all fireplaces, woodstoves and other gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the Construction Code and shall be subject to the permits and inspections required by the Construction Code.

Add the following items to Section N1101.2.1:

3. Compliance may be demonstrated by complying with one of the Packages entitled "Zone 3 Single- Family Prescriptive Packages - 2000/2003 IECC" (these packages are available for download at http://www.energycodes.gov

or

For any detached one- and two-family dwelling, compliance may be demonstrated by participation in the Energy Star, Engineered for Life, Environments for Living or other such nationally recognized third party energy program approved by the building official.

participation in the City of Scottsdale's Green building program.

Revise Table N1102.1, "Simplified Prescriptive Building Envelope Thermal Component Criteria", as follows:

	MAXIMU	Maximum	MINIMUM INSULATION R-VALUE [(hr·ft <sup>2</sup> .ºF)/Btu]					
Scott	M GLAZING U- FACTOR	Glazing Solar Heat Gain Coefficient (Shgc)	Ceiling s	Wall s	Floors (above unconditione despace)	Baseme nt walls	Slab perimeter R-value and depth	Crawl space walls
15 % glazing or less	0.60	0.40	<u>R-30</u>	<u>R-13</u>	<u>R-19</u>	<u>R-8</u>	<u>R-0</u>	<u>R-0</u>
25 % glazing or less	<u>0.45</u>	0.40	R-38	R-19	<u>R-19</u>	<u>R-8</u>	R-5 Full depth of stem	R-5 Full depth of stem

Section M1307.3 is amended to read as follows:

**M1307.3 Elevation of ignition source**. Appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate with a private garage through openings shall be considered to be part of the private garage.

**Exception:** Clothes dryers installed in private garages.

Add the following Section M1307.6.:

M1307.6 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

Section M1601.3.2, Support, add a third sentence to read:

Registers, grilles and diffusers shall be mechanically fastened to rigid supports or structural members on at least two opposite sides in addition to being connected to the ductwork they serve.

Section M1701.4 is amended to read as follows:

M1701.4 Prohibited sources. Combustion air ducts and openings shall not connect appliance enclosures with space in which the operation of a fan may adversely affect the flow of combustion air. Combustion air shall not be obtained from an area in which flammable vapors present a hazard. Fuel-fired appliances shall not obtain combustion air from any of the following rooms or spaces:

- 1. Sleeping rooms.
- 2. Bathrooms.
- 3. Toilet rooms.

**Exception:** The following appliances shall be permitted to obtain combustion air from sleeping rooms, bathrooms and toilet rooms:

- 1. Solid fuel-fired appliances provided that the room is not a confined space and the building is not of unusually tight construction.
- 2. Appliances installed in an enclosure in which all combustion air is taken from the outdoors and the enclosure is equipped with a solid weatherstripped door and self-closing device.

Section M1702.2 is amended to read as follows:

M1702.2 Confined space. Where the space in which the appliance is located does not meet the criterion specified in Section M1702.1, two permanent openings to adjacent spaces shall be provided so that the combined volume of all spaces meets the criterion. The top edge of one opening shall be within 12 inches (305 mm) of the top and the bottom edge of one within 12 inches (305 mm) of the bottom of the space, as illustrated in Figure M1702.2. Each opening shall have a free area equal to a minimum of 1 square inch per 1,000 Btu/h (2.20 mm2/W) input rating of all appliances installed within the space, but not less than 100 square inches (0.064 m2).

Section M1703.2 is amended to read as follows:

M1703.2 Two openings or ducts. Outside combustion air shall be supplied through openings or ducts, as illustrated in Figures M1703.2(1), M1703.2(2), M1703.2(3) and M1703.2(4). The top edge of one opening shall be within 12 inches (305mm) of the top of the enclosure, and the bottom edge of one within 12 inches (305mm) of the bottom of the enclosure. For LPG appliances, any duct serving the lower opening shall be at the floor level and slope to the outdoors without traps or pockets. Openings are permitted to connect to spaces directly communicating with the outdoors, such as ventilated crawl spaces or ventilated attic spaces. The same duct or opening shall not serve both combustion air openings. The duct serving the upper opening shall be level or extend upward from the appliance.

#### Delete SECTION M2006.2 Location. in its entirety.

Section G2415.9 is amended to read as follows:

**G2415.9 (404.9) Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade, for metal, and 18 inches for plastic except as provided for in Section G2414.9.1.

#### Delete Section G2415.9.1.

Add the following paragraph to Section G2425.8 (501.8) Equipment not required to be vented.

Oxygen-depletion safety system. Unvented room heaters shall be equipped with an oxygen-depletion-sensitive safety shutoff system. The system shall shut off the gas supply to the main and pilot burners when the oxygen in the surrounding atmosphere is depleted to the percent concentration specified by the manufacturer, but not lower than 18 percent. The system shall not incorporate field adjustment means capable of changing the set point at which the system acts to shut off the gas supply to the room heater. The aggregate input rating of such appliances and equipment installed within the room or space shall not exceed 40 KBtu per hour.

## Chapters 25 through 32 are deleted. Refer to the Mechanical Code and Plumbing Code for plumbing requirements.

Table E3503.1 is revised to read:

**Table E3503.1** Conductor Types and Sizes for 120/240-Volt <u>and 120/208-Volt</u>, 3-Wire, Single-Phase Dwelling Services and Feeders. Conductor Types RH, RHH, RHW, RHW-2, THHN, THHW, THW-2, THWN-2, XHHW, XHHW-2, SE, USE, USE-2

Co	onductor				
Copper	Aluminum or	Service or F	Min. Ground		
(AWG or kcmil)	Copper-Clad	Rating (Amperes)		Conductor <sup>a</sup>	
	Aluminum	≤ 30°C	> 30°C	Copper	Alum
4	2	100		8 <sup>b</sup>	6°
3	1	110		8 <sup>b</sup>	6°
2	1/0	125	100	8 <sup>b</sup>	6°
1	2/0	150	125	6°	4
1/0	3/0	175	150	6°	4

2/0	4/0	200	<u>175                                    </u>	4 <sup>d</sup>	$2^d$
3/0	250	225	200	4 <sup>d</sup>	$2^d$
4/0	300	250	<u>225</u>	<b>2</b> <sup>d</sup>	1/0 <sup>d</sup>
250	350	300	<u>250</u>	<b>2</b> <sup>d</sup>	1/0 <sup>d</sup>
350	500	350	300	<b>2</b> <sup>d</sup>	1/0 <sup>d</sup>
400	600	400	350	1/0 <sup>d</sup>	3/0 <sup>d</sup>

# <u>CAUTION - UTILITY COMPANY CONDUCTOR SIZE REQUIREMENTS MAY VARY. CONSULT WITH SERVING UTILITY PRIOR TO INSTALLATION.</u>

- a. Where protected by a metal raceway, grounding electrode conductors shall be electrically bonded to the metal raceway at both ends.
- b. No. 8 grounding electrode conductors shall be protected with metal conduit or nonmetallic conduit.
- c. Where not protected, No. 6 grounding electrode conductors shall closely follow a structural surface for physical protection. The supports shall be spaced not more

than 24 inches on center and shall be within 12 inches of any enclosure or termination.

d. Where the sole grounding electrode system is a ground rod or pipe as covered in Section E3508.2, the grounding electrode conductor shall not be required to be

larger than No. 6 copper or No. 4 aluminum. Where the sole grounding electrode system is the footing steel as covered in Section E3508.1.2, the grounding electrode

conductor shall not be required to be larger than No. 4 copper conductor.

Add the following sentence to Section E3601.1:

Aluminum conductors are not allowed for branch circuits. Section E3603.2 is amended to read as follows:

**E3603.2 Kitchen and dining area receptacles.** A minimum of two 20-ampere-rated branch circuits shall be provided to serve receptacles located in the kitchen, pantry, breakfast area, dining area or similar area of a dwelling. The kitchen countertop receptacles shall be served by a minimum of two 20-ampere-rated branch circuits, either or both of which shall also be permitted to supply other receptacle outlets in the kitchen, pantry, breakfast area and dining area.

Section E3801.11 is amended to read as follows:

**E3801.11 HVAC outlet.** A 125-volt, single-phase, 15 or 20 ampere rated convenience receptacle outlet shall be installed for the servicing of heating, air-conditioning and refrigeration equipment located in attics and crawl spaces. The receptacle shall be accessible and shall be located on the same level and within 25 feet (7620 mm)of the heating, air-conditioning and refrigeration equipment. The receptacle outlet shall not be connected to the load side of the HVAC equipment disconnecting means and shall be protected in accordance with Section E3802.4.

Section E3808.8 is amended to read as follows:

**E3808.8 Types of Equipment Grounding Conductors.** The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- 1. A copper or other corrosion-resistant conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.
- 2. Rigid metal conduit.
- 3. Intermediate metal conduit.
- 4. Electrical metallic tubing with an individual equipment grounding conductor.

- 5. Flexible metal conduit <u>with an individual equipment grounding conductor and where both</u> the conduit and fittings are listed for grounding.
- 6. Armor of Type AC cable with an individual equipment grounding conductor.
- 7. Surface metal raceway.
- 8. Metal-clad cable, where both the cable and fittings are listed for grounding.
- 9. Liquidtight flexible metal conduit <u>with an individual equipment grounding conductor and</u> terminated with fittings listed for grounding.

Delete Appendix G in its entirety and substitute the following to read:

### AG101 GENERAL

**AG101.1 - General** The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

AG101.2 Standards of Quality. In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements of ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

#### **AG102 - DEFINITIONS**

For the purpose of this section, certain terms, words and phrases are defined as follows:

ABOVEGROUND/ON-GROUND POOL. See definition of "swimming pool."

**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

**GRADE** is the underlying surface, such as earth or a walking surface.

HOT TUB. See definition of "spa, non-self-contained" and "spa, self-contained."

IN-GROUND POOL. See definition of "swimming pool." SEPARATION FENCE is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

**SPA, NONSELF-CONTAINED,** is a hydro-massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A non-self-contained spa is intended for recreational bathing and contains water over **18** inches ( **457** mm) deep.

**SPA, SELF-CONTAINED,** is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 24 inches (610 mm) deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over **18** inches ( **457** mm) deep. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools.

**SWIMMING POOL, INDOOR,** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR,** is any swimming pool that is not an indoor pool.

#### **AG103 – BARRIER REQUIREMENTS**

AG103.1 - Outdoor Swimming Pool. An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least **60** inches ( **1524** mm) above grade measured on the side of the barrier that faces away from the swimming pool. The top of a barrier that separates the pool only from habitable spaces on the same property shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 45 inches (1143 mm) apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

Where common fences on adjacent property lines of existing developed lots serve as the barrier, the height may be measured on the side that faces the swimming pool. The pool side of the barrier shall be not less than 20 inches from the edge of the water.

2. Openings in the barrier shall not allow passage of a 13/4-inch-diameter (44.5 mm) sphere.

**Exceptions:** a. When vertical spacing between such openings is 45 inches (1143 mm) or more, the opening size may be increased such that the passage of a 4-inch-diameter (102 mm) sphere is not allowed.

- b. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 45 inches (1143 mm) or more.
- 3. Chain link fences used as the barrier shall not be less than 11 gage.
- 4. Where access gates are provided, they shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self- latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
- 5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section AG103.1 shall be provided.

**Exception:** One of the following may be used in lieu of a separation fence:

a. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.

b. An alarm installed on all doors with direct access to the pool.

The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dba when measured indoors at 10 feet (3048 mm). The alarm shall automatically

- reset under all conditions. The alarm system shall be equipped with a manual means, such as a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.
- c. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
- 6. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.
- 7. A pool safety cover which complies with ASTM F 1346-91 may be used to meet the requirements of Items 1 through 6 above for barrier protection between the dwelling unit and swimming pool provided all other portions of the perimeter fencing around the yard are installed and maintained as required. If switching devices are used for operation of the pool safety cover, they shall be key-operated, locked away, or otherwise located in an inaccessible location. An inaccessible location shall be at a height of at least 54 inches above the deck or adjacent ground level and where the entire pool can be visually inspected during cover operation.
- 8. The building official may grant an exception to the above barrier requirements when it is determined that there is a natural barrier existing on the premises in the form of thorny/spiny vegetation, landscaping, or topography which prevents access to the pool area. An exception may also be granted for barrier protection between the dwelling unit and swimming pool when such protection precludes access by a disabled adult resident.
- **AG103.2 Requirements Indoor Swimming Pool.** For an indoor swimming pool, protection shall comply with the requirements of Section 103.1, Item 5.
- AG104 Spas and Hot Tubs. For a non-self-contained and self-contained spa or hot tub, protection shall comply with the requirements of Section 103.1.
  - **Exception:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 103.1.
- AG105 Responsibility of Builder/Installer. In the case of new swimming pool, spa, or hot tub construction, it shall be the responsibility of the builder/installer to inform the pool owner of the above barrier requirements. Violations shall be remedied in accordance with Section 31-33 of the Scottsdale Revised Code.
- **AG106** Responsibility of Owner/Tenant. It is the responsibility of the property owner and any other person in responsible charge of a swimming pool to ensure that the required swimming pool barrier, including all gates, doors, locks, alarms, and latches are maintained in safe and good working order at all times. No person shall alter or remove any portion of a swimming pool barrier except to repair, reconstruct, or replace the barrier in compliance with the provisions of this chapter.
- AG107 Nuisance and Property Maintenance. Swimming pools, spas, and hot tubs constructed after the enactment of this chapter which are not enclosed or protected by a barrier as required in Section 103.1 are hereby declared to be unsafe and nuisance, and shall be resolved by the Code Enforcement Unit of the Citizen & Neighborhood Resources Department under the procedures outlined in Chapter 18 of the Scottsdale Revised Code.

(End Of Amendments)